

RECOMBINANT MYCOBACTERIA OVEREXPRESSING D-ALANINE LIGASE AND  
USES THEREFORE

ABSTRACT OF THE DISCLOSURE

Recombinant mycobacterial strains which overproduce essential biosynthetic enzymes of pathogenic mycobacteria are provided. These strains overproduce enzymes involved in the synthesis and incorporation of D-alanine into mycobacterial peptidoglycan, the backbone of the mycobacterial cell wall. These overproducing strains may be used as reference strains in *in vitro* screening methods to identify antimycobacterial agents.